COMPARING CIVIL-MILITARY RESPONSES TO THE COVID CRISIS: OBSERVATIONS FOR THE FUTURE

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Summary

The COVID pandemic has been the biggest threat to the health and security of the global population so far in the 21st Century. This caused a significant impact on military activities and required substantial changes to military health systems. Furthermore, armed forces played a major role in general support to governments' responses to the crisis and made noticeable contributions to supporting national health and social care systems. This poster presents a typology for categorising these military activities based on multiple international case examples, by reviewing a range of sources including academic publications, official reports and presentations at conferences. This typology could be used to analyse the impact of COVID on military capability and the breadth of activities undertaken by an individual country's armed forces in support of national crisis response. This would enable a detailed comparison between countries to facilitate lessons learned and the residual military requirements to mitigate future global health emergencies.

Introduction

The **COVID crisis** has had significant impacts on the **health and wider security** of our nations and the global community. All governments mobilised their national resources in support of their crisis response, including their armed forces. At the same time, it was necessary to continue essential **military tasks in order to prevent the health crisis becoming a wider security crisis**. This represented an unprecedented level of **civil-military cooperation**. The Centre for Conflict and Health Research has undertaken various projects over the past 2 years to examine the military contribution the response to the COVID pandemic in order to identify lessons for national resilience. This poster presents our **typology for military activities during the COVID response**. This typology provides a structure to compare civil-military relations between countries and provide insights for a playbook for the military response to future health emergencies.

Methods

We previously published a conceptual typology for comparing military activities to support the health response during the COVID crisis based on our work during 2020 and 2021 (1). This poster extends the typology across 4 high-level groups: **maintaining military capability; protecting the health of the armed forces and beneficiaries of military health systems; generic military assistance to the national health system response; specific military assistance to the national health and social care response**. Each group was deconstructed to create a subordinate list of military activities. The national health and social care response was analysed using a **'care pathway approach'** by considering all the care services that a citizen might receive for COVID from **protection through to recovery** from an infection. This covers both **community care services** (Figure 1) and **hospital services** (Figure 2). To validate the typology, we searched for information on the roles of a country's armed forces during the COVID crisis using sources that aggregated primary data from an authoritative range of references. The sources included our previous analyses, academic papers, official reports, and briefings by senior military representatives at conferences or other public activities (listed at the QR Code at the end of this poster). Each mention of an activity is shown as a country flag in Tables 1-4.

Figure 1

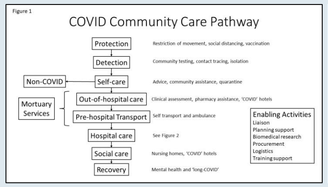
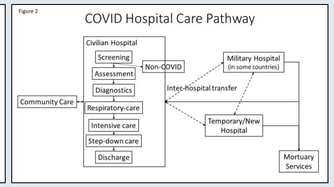


Figure 2



Results and Discussion

We found sources that covered military activities from the following countries: Australia, Bangladesh, Belgium, Brazil, Canada, People's Republic of China, Spain, France, United Kingdom, Italy, India, Indonesia, Israel, Republic of Korea, Nigeria, Pakistan, Russian Federation, Sweden, Taiwan, Tunisia, United States. Overall, there is a record of at least one country undertaking an activity listed in the tables except for a small number of activities under the grouping 'specific military assistance to the national health and social care response' in Table 4. The tables show many activities that were undertaken by several countries. This provides confidence that these categories record actual activities. These tables are not an authoritative list of every activity undertaken by an individual country because no source was an assured compilation of formal records from a national Ministry of Defence.

Common activities across many countries include: impact on military activities, technical advice to the executive, health communication, COVID testing and vaccination for beneficiaries, military liaison and embedded personnel to crisis management, repatriation of citizens, movement of materiel, support to COVID testing, support to vaccination, support to medical evacuation, personnel augmentation to civilian hospitals. The following activities have fewer citations that might indicate significant differences between countries: environmental decontamination, border security, internal security, medical research, out-of-hospital support to communities, use of field hospitals, use of hospital ships, use of temporary medical facilities.

Table 1 - Maintaining Military Capability – Impact of COVID infections on military activities or Adoption of New Tasks/Ways of Working to protect health.

Activity	Countries	Definition/Remarks
1.1 Command and Control C2		Maintenance of military C2 capability including working from home.
1.2 Existing Operations		Adverse impact.
1.2.1 National		
1.2.2 International		Including withdrawal of military personnel from overseas missions.
1.3 Rotations of forces		Adverse impact of COVID on planned rotation of forces.
1.4 Maritime Operations		Adverse impact, especially COVID-19 outbreaks on board ships/submarines.
1.5 Reaction Forces		Adverse impact on forces held ready to react to emergencies.
1.6 Training		Adverse impact.
1.6.1 Individual Training		Including new online training.
1.6.2 Collective Training		Training in groups or units.
1.6.3 Mission-specific Training		Training for specific missions.
1.6.4 Recruit/Entry Training		Including online training for new members of the Armed Forces.
1.7 Recruiting		Adverse impact, including medical restrictions on recruits with a history of COVID infection.
1.8 New ways of working		Changes including remote working.

Table 2 - Protecting the health of the Armed Forces and Beneficiaries of military health systems

Activity	Countries	Remarks
2.1 Technical advice to the 'executive'		Changes to routine role.
2.2 Health communication		Changes to routine role.
2.2.1 To military personnel		New messages/channels due to COVID.
2.2.2 To beneficiaries		Non-military audiences.
2.3 Self-care support		
2.3.1 At home		Supports self-management of COVID
2.3.2 COVID hotels		Designated military accommodation for COVID contacts or patients including quarantine.
2.4 COVID Testing(of beneficiaries)		Military involvement in COVID testing of military personnel of beneficiaries.
2.5 Changes to arrangements for garrison healthcare		Including video/remote consultation.
2.6 COVID Vaccinations		Administration by military to military personnel or beneficiaries.
2.7 Clinical Care		Specific COVID therapies for military cases
2.8 Recovery and Rehabilitation		Creation of clinical services to assess/treat 'long-COVID' patients.

Table 3 - Generic military assistance to the national crisis response

Activity	Countries	Remarks
3.1 Government emergency management capability and capacity		Assignment of military personnel to augment non-health government command and control.
3.1.1 Military liaison		Advising on military capabilities in national crisis response.
3.1.2 Embedded personnel		Members of non-health COVID response management teams
3.2 Augmentation of transport system		
3.2.1 Global repatriation		Military assistance to repatriation of citizens (including COVID cases)
3.2.2 Movement of people/materiel		Generic use of military transport for non-clinical logistic movement.
3.2.2.1 Land		
3.2.2.2 Air		
3.2.2.3 Sea		
3.3 Border security		Border control including medical screening at points of entry or exit
3.4 Internal security		Direct support to general Civil Police duties – not specifically COVID
3.5 Environmental decontamination		Use of military CBRN or other units to spray or other administration of viricidal agents.
3.6 Other community support		Non-health community support – provision of food/basic essentials
3.7 Cyber security		Increased threat/response
3.7.1 Military		Likely to be classified
3.7.2 Civilian/national		Military assistance to protect wider government/civilian/commercial IT systems.
3.8 Intelligence		Additional tasks due to COVID
3.8.1 Military		Likely to be classified
3.8.2 Civilian/national		Military assistance to civilian internal security/police.
3.9 Strategic communications		Additional tasks due to COVID
3.9.1 Military		New communications activities due to COVID.
3.9.2 Civilian/national		Military assistance to government communications to national population.
3.10 Diplomacy		
3.10.1 Military diplomacy		Increased military activities due to COVID.
3.11.2 Military health diplomacy		Specific health activities due to COVID.

Future work will consider the volume of each military activity as a proportion of the size of the armed forces and as a proportion of the size of the overall government response. We will also consider how these activities evolved across the duration of the pandemic,.

Table 4 - Specific military assistance to the national health and social care response

Activity	Countries	Remarks
4.1 System Augmentation		Assignment of military personnel to civilian health management system.
4.1.1 National command and control		Assignment of personnel at the national level
4.1.2 Regional/local command and control		Assignment of personnel at the regional/local level
4.1.3 Medical personnel augmentation		Specific assignment of military health professionals to civilian health management agencies.
4.1.4 Medical Logistics		Specific assistance for medical commodities.
4.1.4.1 Procurement		Military assistance to general government procurement of COVID material.
4.1.4.2 Manufacture		Support to civilian industry, or use of military manufacture facilities
4.1.4.2.1 PPE		All forms of personal protective equipment.
4.1.4.2.2 Sanitisers		All forms of viricidal agents including hand sanitisers.
4.1.4.2.3 Drugs		Increased outputs or specific agents for COVID.
4.1.4.2.4 Oxygen		Manufacture and/or distribution.
4.1.4.2.5 Ventilators		Manufacture or other engineering support.
4.1.4.2.6 Vaccines		Vaccine research or manufacture.
4.1.4.2.7 Other health commodities		New health commodities – e.g. convalescent plasma.
4.1.4.3 Warehousing		For COVID commodities.
4.1.4.4 Distribution		For COVID commodities.
4.1.5 Medical research		COVID related research by military scientific institutions (not vaccine).
4.2 Community Care Pathway		Social and welfare care services
4.2.1 Public health messaging		Public awareness, including support to national call centres.
4.2.2 Internal enforcement of restriction of movement		Enforcing wearing of PPE, quarantine, restriction of movement, including control of internal borders
4.2.3 Management of quarantine facilities		For civilians.
4.2.4 Support to vaccination services		For civilians.
4.2.5 Detection of COVID		
4.2.5.1 Community Testing		Temperature checks and COVID testing.
4.2.5.2 Contact tracing		Call centres and other measures.
4.2.6. Health support to isolated or vulnerable populations		Overseas, rural, or quarantined communities specifically identified
4.2.4 Out-of-hospital care		Community health centres and home visiting.
4.2.5 Pre-hospital transport		Transport to first contact medical facilities.
4.2.6 Augmentation of ambulance services		Transport between medical facilities – land, air and sea
4.2.7 Nursing and Social Care		Nursing and elderly care homes.
4.2.8 Post-COVID recovery		Care at home for civilians
4.2.9 Mortuary Services		
4.3 Hospital Care Pathway		
4.3.1 Military Hospitals		Hospital administered under the Ministry of Defence.
4.3.1.1 Designated COVID hospitals		Designation of military hospitals specifically for COVID patients.
4.3.1.2 General access for civilian patients		Extension of eligibility to general civilians.
4.3.1.3 Access for specific new populations		Assignment of specific new clinical services for civilians.
4.3.2 New/temporary hospitals		Military involvement in new clinical facilities created due to COVID.
4.3.2.1 Temporary hospitals		Conversion of non-military buildings/infrastructure.
4.3.2.1.1 Build		Design, construction or equipment.
4.3.2.1.2 Staffing		Assignment of military personnel.
4.3.2.1.3 Operate		Military involvement in managing new facilities.
4.3.2.2 Military field hospitals		Discrete military medical units using military tents or other structures.
4.3.2.3 Military hospital ships		Or specific use of medical facilities on military ships for care of non-military COVID patients.
4.3.3 Personnel augmentation to Civilian Hospitals		General augmentation to healthcare facilities, including non-healthcare general duties
4.3.3.1 Screening for COVID		Prior to entry to health facilities
4.3.3.2 Emergency Assessment		Military assistance.
4.3.3.3 Diagnostics		
4.3.3.3.1 COVID laboratory Testing		Military assistance or use of military laboratories for civilian samples for COVID testing.
4.3.3.3.2 Other diagnostics		Not COVID specific.
4.3.3.4 Respiratory Care		Inpatient COVID care not ITU.
4.3.3.5 Intensive Care		Including ventilatory support
4.3.3.6 Step-down Care		Internal step-down care facilities run in hospitals and general nursing care.
4.3.3.7 Discharge		Augmentation of step-down care facilities run by hospitals.
4.3.3.8 Other COVID clinical services		E.g. COVID outpatient services

Conclusions

This typology covers all military activities in support of the national response to the COVID crisis in the countries studied. It is suggested that international comparisons of the role of the armed forces in the response to the COVID pandemic would be worthwhile to inform global and national policy. Whilst the recently published WHO guidance document on a national civil–military health collaboration framework for strengthening health emergency preparedness provides valuable high-level suggestions (2), it might benefit from practical case-examples and lessons from individual countries. Such comparisons would enable more detailed recommendations on policy choices on the role of national armed forces as part of the mitigation of health threats, including advising on those interventions that seemed to have limited success.

Military medical capabilities that are likely to be needed to respond to future health emergencies include: augmentation to ambulance services, augmentation to civilian hospitals, treatment of civilian patients in military hospitals, support to nursing and social care services, support to isolated or overseas communities, non-specialist military assistance to national testing and vaccination campaigns.

Activities that may not be suitable for the response for future health emergencies include: building temporary hospitals, environmental decontamination by area spraying, use of military resources for intelligence collection or strategic communication to national citizens.

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The full poster and sources are available at the following QR Code:

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